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(71) Applicant (for all designated States except US): **THE GENERAL HOSPITAL CORPORATION d/b/a MASSACHUSETTS GENERAL HOSPITAL** [US/US]; 55 Fruit Street, Boston, MA 02114 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WU, Tao** [US/US]; 3 River Street, Winchester, MA 01890 (US). **MOORE, Richard** [US/US]; 151 Annursnac Hill Road, Concord, MA 01742 (US). **KOPANS, Daniel** [US/US]; 20 Manitoba Road, Waban, MA 02468 (US).

(74) Agent: **GEARY, William, C., III**; Nutter McClennen & Fish LLP, World Trade Center West, 155 Seaport Boulevard, Boston, MA 02210-2604 (US).

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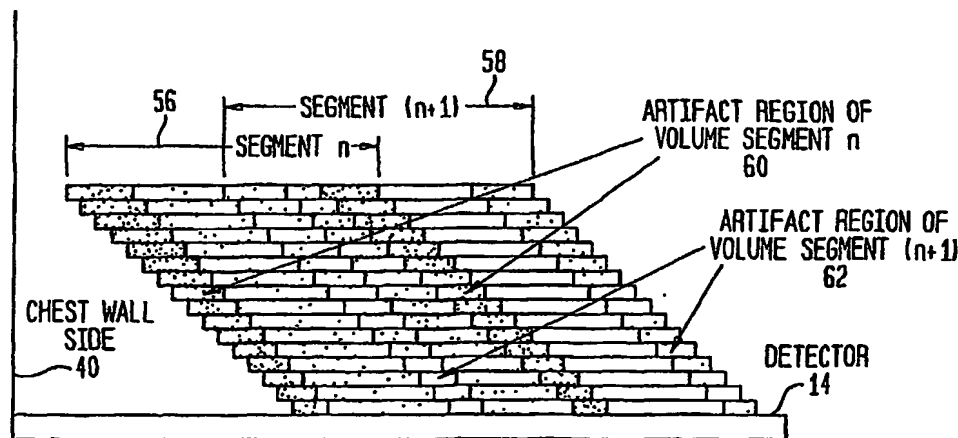
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(54) Title: **MULTI-SEGMENT CONE-BEAM RECONSTRUCTION SYSTEM AND METHOD FOR TOMOSYNTHESIS IMAGING**



(57) Abstract: A tomosynthesis method for creating a three-dimensional reconstruction of a target element volume (52) acquires radiation absorbance images of the target element (52) volume through a limited plurality of positions. The target element volume is divided into a plurality of volume segments (56, 58) and a reconstruction algorithm is applied to each segment (56, 58) to generate a three-dimensional reconstruction of each volume segment. The three-dimensional reconstruction of each volume segment (56, 58) is then merged to create a three-dimensional reconstruction of the target volume. A tomosynthesis system and a computer program product for carrying out tomosynthesis are also provided.

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